

# PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Mapping of Course outcome with program outcome  
Regulation -2017  
III Year

V SEMESTER

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8501 – DIGITAL COMMUNICATION**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C301.1</b>	Describe the operating principles of information theory	U
<b>C301.2</b>	Design and implement base band transmission schemes	A
<b>C301.3</b>	Design and implement band pass signaling schemes	A
<b>C301.4</b>	Analyze the spectral characteristics of band pass signaling schemes and their noise performance	AN
<b>C301.5</b>	Design error control coding schemes	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C301.1</b>	2	2	1	2	0	0					1	1	2	1	1
<b>C301.2</b>	3	3	2	3	1	1					2	2	3	2	3
<b>C301.3</b>	3	3	2	3	1	1					2	2	3	2	3
<b>C301.4</b>	3	3	3	3	2	2					3	3	3	2	3
<b>C301.5</b>	3	3	2	3	1	1					2	2	3	2	3
<b>C301</b>	2.8	2.8	2	2.8	1	1					2	2	2.8	1.8	2.6

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8553 – DISCRETE TIME SIGNAL PROCESSING**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
C302.1	Apply DFT for the analysis of digital signals and systems	A
C302.2	Design IIR and FIR filters	A
C302.3	Characterize the effects of finite precision representation on digital filters	A
C302.4	Design multirate filters	A
C302.5	Apply adaptive filters appropriately in communication systems	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	3	3	2	2	2	1					1	2	3	3	2
C302.2	3	3	2	2	2	1					1	2	3	3	2
C302.3	3	3	2	2	2	1					1	2	3	3	2
C302.4	3	3	2	2	2	1					1	2	3	3	2
C302.5	3	3	2	2	2	1					1	2	3	3	2
C302	3	3	2	2	2	1					1	2	3	3	2

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8552 – COMPUTER ARCHITECTURE AND ORGANIZATION**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C303.1</b>	Describe data representation, instruction formats and the operation of a digital computer	U
<b>C303.2</b>	Illustrate the fixed point and floating-point arithmetic for ALU operation	U
<b>C303.3</b>	Discuss about implementation schemes of control unit and pipeline performance	A
<b>C303.4</b>	Explain the concept of various memories, interfacing and organization of multiple processors	U
<b>C303.5</b>	Discuss parallel processing technique and unconventional architectures	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
<b>C303.1</b>	2	2	2	1	1	1	0	0	0	0	0	1	2	2	2
<b>C303.2</b>	2	2	2	1	1	1	0	0	0	0	0	1	2	2	2
<b>C303.3</b>	3	3	3	2	2	2	0	0	0	0	0	2	3	3	3
<b>C303.4</b>	2	2	2	1	1	1	0	0	0	0	0	1	2	2	2
<b>C303.5</b>	2	2	2	1	1	1	0	0	0	0	0	1	2	2	2
<b>C303</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>

**HOD/ECE**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8551 – COMMUNICATION NETWORKS**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C304.1</b>	Identify the components required to build different types of networks	R
<b>C304.2</b>	Choose the required functionality at each layer for given application	U
<b>C304.3</b>	Identify solution for each functionality at each layer	R
<b>C304.4</b>	Trace the flow of information from one node to another node in the network	U
<b>C304.5</b>	Summarize the various Application requirements	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C304.1</b>	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1
<b>C304.2</b>	2	2	1	1	1	1	0	0	0	0	0	2	2	2	2
<b>C304.3</b>	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1
<b>C304.4</b>	2	2	1	1	1	1	0	0	0	0	0	2	2	2	2
<b>C304.5</b>	2	2	1	1	1	1	0	0	0	0	0	2	2	2	2
<b>C304</b>	<b>1.6</b>	<b>1.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>

**HOD/ECE**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**ORO551 – RENEWABLE ENERGY SOURCE**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C306.1</b>	Exposure on solar radiation and its environment impact of power	U
<b>C306.2</b>	Learn the various collectores used for storing solar energy	U
<b>C306.3</b>	Understand the various applications in solar energy	U
<b>C306.4</b>	Study about the wind energy and biomass and its economic aspects	U
<b>C306.5</b>	Learn about geothermal energy with other energy sources	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C306.1</b>	2	1										1	1	1	1
<b>C306.2</b>	2	1										1	1	1	1
<b>C306.3</b>	2	1										1	1	1	1
<b>C306.4</b>	2	1										1	1	1	1
<b>C306.5</b>	2	1										1	1	1	1
<b>C306</b>	<b>2</b>	<b>1</b>										<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

**HOD/ECE**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**GE8077 – TOTAL QUALITY MANAGEMENT**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C305.1</b>	Discuss various dimensions of product and service quality	U
<b>C305.2</b>	Apply the TQM principles for quality improvement in organization	A
<b>C305.3</b>	Apply the TQM principles for quality improvement in organization	A
<b>C305.4</b>	Use QFD tool to design and develop a new product as per customer requirements.	A
<b>C305.5</b>	Explain various ISO Standards and Quality systems practiced in various sector	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C305.1</b>						2	2	2	2	2	1	2	0	2	1
<b>C305.2</b>						3	3	3	3	3	2	2	1	3	2
<b>C305.3</b>						3	3	3	3	3	2	2	1	3	2
<b>C305.4</b>						3	3	3	3	3	2	2	1	3	2
<b>C305.5</b>						2	2	2	2	2	1	2	0	2	1
<b>C305</b>						<b>2.6</b>	2.6	2.6	2.6	2.6	<b>1.6</b>	<b>2</b>	<b>0.6</b>	<b>2.6</b>	<b>1.6</b>

**HOD/ECE**



**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8562– DIGITAL SIGNAL PROCESSING LABORATORY**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C307.1</b>	Carryout basic signal processing operations	U
<b>C307.2</b>	Demonstrate their abilities towards MATLAB based implementation of various DSPsystems	A
<b>C307.3</b>	Analyze the architecture of a DSP Processor	AN
<b>C307.4</b>	Design and Implement the FIR and IIR Filters in DSP Processor for performingfiltering operation over real-time signals	A
<b>C307.5</b>	Design a DSP system for various applications of DSP	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C307.1</b>	2	2	1	1	1	1					1	1	2	2	1
<b>C307.2</b>	3	3	2	2	2	2					2	2	3	3	2
<b>C307.3</b>	3	3	3	3	3	3					3	3	3	3	3
<b>C307.4</b>	3	3	2	2	2	2					2	2	3	3	2
<b>C307.5</b>	3	3	2	2	2	2					2	2	3	3	2
<b>C307</b>	2.8	2.8	2	2	2	2					2	2	2.8	2.8	2

**HOD/ECE**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8561 – COMMUNICATION SYSTEM LABORATORY**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C308.1</b>	Simulate & validate the various functional modules of a communication system	A
<b>C308.2</b>	Demonstrate their knowledge in base band signaling schemes through implementation of digital modulation schemes	A
<b>C308.3</b>	Apply various channel coding schemes	A
<b>C308.4</b>	Demonstrate their capabilities towards the improvement of the noise performance of communication system	A
<b>C308.5</b>	Simulate end-to-end communication Link	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C308.1</b>	3	2	2	1	2	1					3	3	3	3	3
<b>C308.2</b>	3	2	2	1	2	1					0	0	2	2	2
<b>C308.3</b>	3	2	2	1	2	1					0	0	2	2	2
<b>C308.4</b>	3	2	2	1	2	1					0	0	2	2	2
<b>C308.5</b>	3	2	2	1	2	1					3	3	3	3	3
<b>C308</b>	3	2	2	1	2	1					1.2	1.2	2.4	2.4	2.4

**PERI INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**EC8563 – COMMUNICATION NETWORKS LABORATORY**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C309.1</b>	Communicate between two desktop computers	A
<b>C309.2</b>	Implement the different protocols	A
<b>C309.3</b>	Program using sockets.	A
<b>C309.4</b>	Implement and compare the various routing algorithms	AN
<b>C309.5</b>	Use the simulation tool.	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C309.1</b>	3	2	1	1	2	2					2	2	3	2	2
<b>C309.2</b>	3	2	1	1	2	2					2	2	3	2	2
<b>C309.3</b>	3	2	1	1	2	2					2	2	3	2	2
<b>C309.4</b>	3	2	2	2	3	3					3	3	3	3	3
<b>C309.5</b>	3	2	1	1	2	2					2	2	3	2	2
<b>C309</b>	3	2	1.2	1.2	2.2	2.2					2.2	2.2	3	2.2	2.2

**VI SEMESTER**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8691 – MICROPROCESSOR AND MICROCONTROLLER**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C310.1</b>	Understand the Architecture of 8086 microprocessor.	<b>U</b>
<b>C310.2</b>	learn the design aspects of I/O and Memory Interfacing circuits.	<b>U</b>
<b>C310.3</b>	Interface microprocessors with supporting chips.	<b>AN</b>
<b>C310.4</b>	Study the Architecture of 8051 microcontroller.	<b>U</b>
<b>C311.5</b>	Design a microcontroller based system	<b>A</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C310.1</b>	2	2	2	2	1	1					1	1	2	2	1
<b>C310.2</b>	2	2	2	2	1	1					1	1	2	2	1
<b>C310.3</b>	3	3	3	3	3	3					2	2	3	3	2
<b>C310.4</b>	2	2	2	2	1	1					1	1	2	2	1
<b>C310.5</b>	3	3	3	3	2	2					2	2	3	3	2
<b>C310</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>1.6</b>	<b>1.6</b>					<b>1.4</b>	<b>1.4</b>	<b>2.4</b>	<b>2.4</b>	<b>1.4</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8095 – VLSI DESIGN**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive level
<b>C311.1</b>	• Realize the concepts of digital building blocks using MOS transistor.	<b>U</b>
<b>C311.2</b>	• Design combinational MOS circuits and power strategies.	<b>A</b>
<b>C311.3</b>	Design of memory elements in sequential circuits.	<b>A</b>
<b>C311.4</b>	• Design arithmetic building blocks and memory subsystems.	<b>A</b>
<b>C311.5</b>	• Apply and implement FPGA design flow and testing.	<b>A</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C311.1</b>	2	2	1	1	1	1					1	2	2	2	2
<b>C311.2</b>	3	3	2	2	2	2					2	2	3	3	3
<b>C311.3</b>	3	3	2	2	2	2					2	2	3	3	3
<b>C311.4</b>	3	3	2	2	2	2					2	2	3	3	3
<b>C311.5</b>	3	3	2	2	2	2					2	2	3	3	3
<b>C311</b>	<b>2.8</b>	<b>2.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>					<b>1.8</b>	<b>2</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8652 – WIRELESS COMMUNICATION**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C312.1</b>	Study the characteristic of wireless channel	<b>U</b>
<b>C312.2</b>	Design a cellular system based on resource availability and traffic demands	<b>A</b>
<b>C312.3</b>	Study the various digital signaling techniques for fading channel	<b>U</b>
<b>C312.4</b>	Apply various multipath mitigation techniques	<b>A</b>
<b>C312.5</b>	Understand the concepts of multiple antenna techniques	<b>U</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C312.1</b>	2	2	1	1	1	1					1	2	3	2	2
<b>C312.2</b>	3	3	2	2	2	2					2	3	3	3	3
<b>C312.3</b>	2	2	1	1	1	1					1	2	3	2	2
<b>C312.4</b>	3	3	2	2	2	2					2	3	3	3	3
<b>C312.5</b>	2	2	1	1	1	1					1	2	3	2	2
<b>C312</b>	<b>2.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>					<b>1.4</b>	<b>2.4</b>	<b>3</b>	<b>2.4</b>	<b>2.4</b>

**HOD/ECE**

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**MG8591 – PRINCIPLES OF MANAGEMENT**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C313.1</b>	Summarize the evolution of management thoughts and various challenges of managerial activities in a global	<b>R</b>
<b>C313.2</b>	Explain the types of Planning and Decision making at various levels management in the Organizations	<b>U</b>
<b>C313.3</b>	Discuss various types of Organisation structure.	<b>U</b>
<b>C313.4</b>	List out the steps in Staffing process and stages in Career development.	<b>U</b>
<b>C313.5</b>	Generalize various Controlling techniques to maintain standards in Organizations.	<b>A</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8		PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C313.1</b>						1	1	1		1	1	1	1	1	-
<b>C313.2</b>						2	2	2		2	2	2	2	2	-
<b>C313.3</b>						2	2	2		2	2	2	2	2	-
<b>C313.4</b>						2	2	2		2	2	2	2	2	-
<b>C313.5</b>						3	3	3		3	3	3	3	3	-
<b>C313</b>						2	2	2		2	2	2	2	2	-

**HOD/ECE**



**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8651 – TRANSMISSION LINES AND RF SYSTEMS**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C314.1</b>	Explain the characteristics of transmission lines and its losses	<b>U</b>
<b>C314.2</b>	Write about the standing wave ratio and input impedance in high frequency transmission lines	<b>U</b>
<b>C314.3</b>	Analyze impedance matching by stubs using smith charts	<b>AN</b>
<b>C314.4</b>	Analyze the characteristics of TE and TM waves	<b>AN</b>
<b>C314.5</b>	Design a RF transceiver system for wireless communication	<b>A</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C314.1</b>	2	2	1	1	1	1					1	2	2	2	2
<b>C314.2</b>	2	2	1	1	1	1					1	2	2	2	2
<b>C314.3</b>	3	3	2	2	2	2					2	3	3	3	3
<b>C314.4</b>	3	3	2	2	2	2					2	3	3	3	3
<b>C314.5</b>	3	3	3	3	2	2					2	3	3	3	3
<b>C314</b>	<b>2.6</b>	<b>2.6</b>	<b>1.8</b>	<b>1.8</b>	<b>1.6</b>	<b>1.6</b>					<b>1.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8004 – WIRELESS NETWORKS**  
**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C315.1</b>	Conversant with the latest 3G/4G networks and its architecture	<b>U</b>
<b>C315.2</b>	Design and implement wireless network environment for any application using latest wireless protocols and standards	<b>A</b>
<b>C315.3</b>	Ability to select the suitable network depending on the availability and requirement	<b>U</b>
<b>C315.4</b>	Implement different type of applications for smart phones and mobile devices with latest network strategies	<b>A</b>
<b>C315.5</b>	learn the applications of beyond 4G wireless networks	<b>U</b>

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C315.1</b>	2	2	1	1	1	1					1	2	2	2	1
<b>C315.2</b>	3	3	2	2	2	2					2	3	3	3	2
<b>C315.3</b>	2	2	1	1	1	1					1	2	2	2	1
<b>C315.4</b>	3	3	2	2	2	2					2	3	3	3	2
<b>C315.5</b>	2	2	1	1	1	1					1	2	2	2	1
<b>C315</b>	<b>2.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>					<b>1.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>1.4</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8681 – MICROPROCESSOR AND MICROCONTROLLER LABORATORY**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C316.1</b>	Write ALP Programmes for fixed and Floating Point and Arithmetic operations	U
<b>C316.2</b>	Interface different I/Os with processor	A
<b>C316.3</b>	Generate waveforms using Microprocessors	A
<b>C316.4</b>	Execute Programs in 8051	A
<b>C316.5</b>	Explain the difference between simulator and Emulator	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C317.1</b>	2	2	1	1	1	1					1	1	2		2
<b>C317.2</b>	3	2	1	0	0	0					0	0	0	1	3
<b>C317.3</b>	1	0	0	3	2	1					0	0	0	1	1
<b>C317.4</b>	1	1	3	3	0	0					1	0	0	1	1
<b>C317.5</b>	3	1	0	3	0	0					1	0	1	1	3
<b>C317</b>	<b>2.2</b>	<b>1.2</b>	<b>1</b>	<b>1.8</b>	<b>0.4</b>	<b>0.2</b>					<b>0.4</b>	<b>0</b>	<b>0.2</b>	<b>1</b>	<b>2.2</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8661 – VLSI DESIGN LABORATORY**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C317.1</b>	Write HDL code for basic as well as advanced digital integrated circuit	A
<b>C317.2</b>	Import the logic modules into FPGA Boards	A
<b>C317.3</b>	Synthesize Place and Route the digital Ips	A
<b>C317.4</b>	Design the layouts of Digital & Analog IC Blocks using EDA tools	A
<b>C317.5</b>	Simulate and Extract the layouts of Digital & Analog IC Blocks using EDA tools	A

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C317.1</b>	3	2	1	0	0	0					0	0	0	1	2
<b>C317.2</b>	3	2	1	0	0	0					0	0	0	1	2
<b>C317.3</b>	1	0	0	3	2	1					0	0	0	1	2
<b>C317.4</b>	1	1	3	3	0	0					1	0	0	1	2
<b>C317.5</b>	3	1	0	3	0	0					1	0	1	1	2
<b>C317</b>	<b>2.2</b>	<b>1.2</b>	<b>1</b>	<b>1.8</b>	<b>0.4</b>	<b>0.2</b>					<b>0.4</b>	<b>0</b>	<b>0.2</b>	<b>1</b>	<b>2</b>

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**EC8611 – TECHNICAL SEMINAR**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C318.1</b>	Establish motivation for any topic of interest and develop a thought process for technical presentation	U
<b>C319.2</b>	Organize a detailed literature survey and build a document with respect to technical publications	U
<b>C319.3</b>	Analysis and comprehension of proof-of-concept and related data.	U
<b>C319.4</b>	Effective presentation and improve soft skills.	U
<b>C319.5</b>	Make use of new and recent technology (e.g. Latex) for creating technical reports	U

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C319.1</b>		2		2	2	2		2	2		2	2	2	2	2
<b>C319.2</b>		2		2	2	2		2	2		2	2	2	2	2
<b>C319.3</b>		2		2	2	2		2	2		2	2	2	2	2
<b>C319.4</b>		2		2	2	2		2	2		2	2	2	2	2
<b>C319.5</b>		2		2	2	2		2	2		2	2	2	2	2
<b>C319</b>		2		2	2	2		2	2		2	2	2	2	2

**PERI INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**HS8581 – PROFESSIONAL COMMUNICATION**

**COURSE OUTCOMES**

After successful completion of the course, the students should be able to

CO No.	Course Outcomes	Cognitive Level
<b>C318.1</b>	Make effective presentations	An
<b>C319.2</b>	Participate confidently in Group Discussions.	An
<b>C319.3</b>	Attend job interviews and be successful in them	An
<b>C319.4</b>	Develop adequate Soft Skills required for the workplace	An
<b>C319.5</b>	Develop Team management skills	An

**MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOME**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>C319.1</b>						3				3		3	1	1	2
<b>C319.2</b>						3				3		3	1	1	2
<b>C319.3</b>						3				3		3	1	1	2
<b>C319.4</b>						3				3		3	1	1	2
<b>C319.5</b>						3				3		3	1	1	2
<b>C319</b>						<b>3</b>				<b>3</b>		<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>

